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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/533,847

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Fyodor Urnov

8325-0034 (S34-US1)

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EXAMINER

SISSON, BRADLEY L

ART UNIT

PAPER NUMBER

1634

MAIL DATE

DELIVERY MODE

05/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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|--|--|---|--|
| <p align="center"><b>Advisory Action</b><br/><b>Before the Filing of an Appeal Brief</b></p> | <p><b>Application No.</b><br/>10/533,847</p> | <p><b>Applicant(s)</b><br/>URNOV ET AL.</p> |  |
|  | <p><b>Examiner</b><br/>Bradley L. Sisson</p> | <p><b>Art Unit</b><br/>1634</p>             |  |

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 21 April 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☒ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: 2-5.
- Claim(s) withdrawn from consideration: 1 and 6-15.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_.

/Bradley L. Sisson/  
Primary Examiner  
Art Unit: 1634

Continuation of 3. NOTE: See the attached Notice of Noncompliant Amendment.

Continuation of 11. does NOT place the application in condition for allowance because: At page 8, bridging to page 9 of the response received 21 April 2008, applicant asserts:

"In the instant case, an array of sequences consisting of sequence corresponding to accessible regions is structurally distinguishable from Brennan's arrays because the claimed arrays include only sequences corresponding to accessible regions. By contrast, Brennan's arrays necessarily include both sequences corresponding to accessible regions and sequences corresponding to non-accessible regions. Moreover, the recited process steps (isolation of sequences corresponding to accessible regions) clearly impart the claimed structural distinction (array consisting of only accessible regions as compared to arrays including all 10-mers that inevitably include both accessible and non-accessible sequences)."

The above argument has been considered and has not been found persuasive towards the withdrawal of the rejection for the following reason. While the claims have been amended so to recite that the sequences are that that "correspond to accessible regions of cellular chromatin," the aspect of just what constitutes "accessible" versus "inaccessible" regions of cellular chromatin is less than clear. A review of the specification finds that the term "accessible region" is defined at page 12, lines 26-33, of the specification. For convenience, the definition is reproduced below.

"An 'accessible region' in cellular chromatin is generally one that does not have a typical nucleosomal structure. As such, an accessible region can be identified and localized by, for example, the use of chemicals and/or enzymes that probe chromatin structure. Accessible regions will, in general, have an altered reactivity to a probe, compared to bulk chromatin. An accessible region may be sensitive to the probe, compared to bulk chromatin, or it may have a pattern of sensitivity that is different from the pattern of sensitivity exhibited by bulk chromatin. Accessible regions can be identified by any method known to those of skill in the art for probing chromatin structure."

As can be seen above, the definition is not limiting. Such a holding is based on the use of the modifiers "generally", "in general", and "may have." Accordingly, any nucleotide sequence found in a cell's chromatin could meet this definition.

It is further noted that the entire nucleotide sequence of all chromatin found in numerous bacteria, plants, and animals, including humans, has been determined. Such a showing is considered to demonstrate that all of the chromatin constitutes chromatin from an "accessible region." The oligonucleotides of Brennan are considered to meet this requirement. Further, applicant has not been found to teach which sequence(s) of Brennan do/does not correspond to an accessible region of chromatin as found in some life form.

For the above reasons, and in the absence of convincing evidence to the contrary, claims 2-5 remain rejected under 35 USC 102(b) as being anticipated by US Patent 5,474,796 (Brennan).